

Water Quality Study Van Wert County

Results from samples collected January – December 2004

Town Creek Nutrient Data

Nitrogen and Phosphorus concentrations at four locations in Town Creek

Town Creek Pesticide Data

Pesticide concentrations for samples collected in June and November at three locations in Town Creek.

Municipal and Township Well Pesticide Samples

Pesticide concentrations for June samples of six area municipalities and twelve rural wells.

Van Wert County Ecoli Results

Ecoli Levels from streams leaving Van Wert County and Township wells.

Rainfall Data

Amount of rainfall recorded prior to sampling day, and monthly totals for each year.

A Grant From The Van Wert County Foundation

Municipal Pesticide Samples – 2004

Location	Atrazine	Alachlor	Metolachlor	Metribuzin	Propachlor	Propazine	Simazine	Nitrates (ppm)
Convoy	*	*	*	N/T	*	*	*	*
Delphos	*	*	*	N/T	*	*	*	*
Middle Point	*	*	*	N/T	*	*	*	*
Ohio City	*	*	*	N/T	*	*	*	*
Van Wert	1.4	*	.08	N/T	*	*	*	1.5
Willshire	*	*	*	N/T	*	*	*	*

Results in ppm

Similar to other years, the 2000 samples were void of any detectable levels with the exception of nitrates in the Van Wert sample. However the concentration of nitrates present did not exceed the EPA's HAL of 10ppm.

Township Wells Pesticide Samples – 2004

Location	Alachlor	Atrazine	Metolachlor	Metribuzin	Propachlor	Propazine	Simazine	Nitrates (ppm)
Union	*	*	*	N/T	*	*	*	*
Pleasant	*	*	*	N/T	*	*	.3	*
Tully	*	*	*	N/T	*	*	*	*
Harrison	*	*	*	N/T	*	*	*	*
Willshire	*	*	*	N/T	*	*	*	*
Liberty	*	*	*	N/T	*	*	*	*
York	*	*	*	N/T	*	*	*	*
Jennings	*	*	*	N/T	*	*	*	*
Ridge	*	*	*	N/T	*	*	*	*
Washington	*	*	*	N/T	*	*	*	*
Jackson	*	*	*	N/T	*	*	*	*
Hoaglin	*	*	*	N/T	*	*	*	*

Results in ppm

The samples collected in June 2000, contained no detectable levels of pesticides. This information coincides with previous years, confirming the high quality of well water.

Town Creek Pesticide Data 2004

Location	Date	Alachlor	Acetochlor	Atrazine	Carbofuran	Cyanazine	Fluchloralin	Metolachlor	Metribuzin	Pendimethalin	Propachlor	Simazine	Trifluralin
TC-1	Jun-04	*	*	4.4	*	*	*	6.1	*	*	*	*	*
TC-2	Jun-04	*	*	5.4	*	*	*	8.5	0.7	*	*	*	*
TC-3	Jun-04	*	*	5.6	*	*	*	8.2	.08	*	*	*	*
TC-1	Nov-04	*	*	*	*	*	*	*	*	*	*	*	*
TC-2	Nov-04	*	*	*	*	*	*	*	*	*	*	*	*
TC-3	Nov-04	*	*	*	*	*	*	*	*	*	*	*	*

Only pesticides detected throughout the study are included

- * = Sample was below the detection limit
Sample results are in parts per million (ppm)

Comments:

Town Creek Pesticide samples for 2004 followed a similar pattern as previous years, with some pesticides present in the June samples, and no detectable levels in November. The concentrations found in the June 2004 samples are slightly above average with amounts of Atrazine, Metolachlor, and Metribuzin were present.

Total Nitrogen and Phosphorus 2004

	Nitrate (ppm)					Phosphate (ppm)				
Month	TC-1	TC-2	TC-3	TC-4	AVG.	TC-1	TC-2	TC-3	TC-4	AVG.
January	N/S	6.74	6.31	5.22	6.09	N/S	0.41	0.28	0.30	0.33
February	N/S	6.28	10.57	8.03	8.29	N/S	0.1	0.00	0.00	0.033333
March	N/S	5.89	4.76	5.62	5.42	N/S	0.12	0.15	0.16	0.143333
April	N/S	6.22	5.88	5.19	5.76	N/S	0	0.15	*	0.05
May	N/S	1.8	5.46	2.04	3.10	N/S	0.14	0.35	0.15	0.213333
June	12.72	14.86	14.61	12.63	13.71	0.39	0.37	0.55	0.24	0.386667
July	N/S	3.56	6.35	3.01	4.31	N/S	0.1	0.20	0.11	0.136667
August	N/S	1.85	2.12	2.02	2.00	N/S	0.26	0.24	0.48	0.326667
September	N/S	2.19	2.14	1.6	1.98	N/S	0.18	0.23	0.63	0.346667
October	N/S	1.23	4.22	4.24	2.8	N/S	0.14	0.31	0.24	0.23
November	4.5	4.15	4.95	4.28	2.3	0.11	0	0.20	0.14	0.085
December	N/S	5.96	4.98	4.49	5.14	N/S	0.35	0.36	0.31	0.34

Nitrogen = nitrates + nitrites

Phosphorus=Total Phosphorus

N/S=Not sampled

Shaded boxes indicate values that exceed EPA's HAL of 10ppm Nitrogen.

Comments:

Nitrogen concentrations were average comparing to other years of the study. Levels exceeded the EPA's HAL level in June. This may be due to excessive rain before the time of sampling.

Phosphorus concentrations throughout 2004 were about average compared to the last couple of years. This year however we didn't have any site experience a level higher than the EPA's HAL of 1.0 ppm